

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
ALEXANDRIA DIVISION**

AIRSPACE SYSTEMS, INC.,

Plaintiff,

v.

AXON ENTERPRISE, INC., and

DEDRONE HOLDINGS, INC.,

Defendants.

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CIVIL ACTION 1:24-CV-01625-CMH-LRV

JURY TRIAL DEMANDED

**DEFENDANTS' REPLY IN SUPPORT OF
RULE 12(B)(6) MOTION TO DISMISS**

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Faced with the presence of multiple hallmarks establishing that its patent claims are ineligible under both steps of the *Alice* analysis, Airspace departs from the actual language of the asserted claims and improperly hinges its arguments on unclaimed concepts. This is a fatal legal flaw. Airspace must live with its claims as written, not how Airspace wishes they were written. And, as written, the claims recite functional claim language, are analogous to longstanding human practices, and mirror claims in cases where courts have found ineligibility and granted motions to dismiss. The Court should find that each of the three claims here is patent ineligible.

Separately, Airspace’s opposition highlights its failure to identify any specific Axon or third-party Skydio product. Airspace, for example, relies on an Axon product guide that lists specific Axon and Skydio products available from Axon. However, none of those products in the guide are called “Axon Air / DFR” or Skydio “AADT.” Airspace possessed that guide when it drafted both of its complaints, yet still failed to identify anything other than a generic reference to Axon and Skydio “solutions.” This does not provide sufficient notice of what is accused. And Airspace’s insistence that discovery will reveal which products are at issue is contrary to the very purpose of pleading standards—to prevent unchecked and unjustified fishing expeditions. Airspace’s attempt to shift the pleading burden onto Defendants is improper, and its defective allegations related to Axon and Skydio in Counts II and III should be dismissed.

I. AIRSPACE’S FLAWED ARGUMENTS DO NOT SAVE ITS CLAIMS UNDER 35 U.S.C. § 101.

A. Claim 21 Of The ’959 Patent Is Directed To The Abstract Idea Of Communicating Identification Information And Does Not Recite An Inventive Concept.

1. Step One: Airspace Fails To Rebut The Indicators Of Abstractness In Claim 21.

(a) Airspace’s Overgeneralization Argument Is Inconsistent With Its Opposition Brief And Ignores Claim 21’s Language.

Airspace does not dispute that “communicating identification information” is an abstract

idea. *See generally* Doc. 32. Instead, Airspace argues that Defendants overgeneralized Claim 21. *Id.* at 5. Not so. *Alice* step one first identifies the focus of the claimed advance over the prior art and then determines whether that focus is on an abstract idea. *See* Doc. 18 at 7-8 (citing *AI Visualize, Inc. v. Nuance Commc'ns, Inc.*, 97 F.4th 1371, 1378 (Fed. Cir. 2024)). Consistent with Defendants' analysis of the claimed advance, Airspace's opposition admits that "[c]ritically, the prior art was bereft of an 'analogous identification method or system to a license plate for UAVs.'" Doc. 32 at 6 (cleaned up). The alleged advance over the state of the art thus focuses on identification of vehicles.¹ *See* Doc. 18 at 7-9. And that is why the very first lines of Claim 21's preamble—which identifies the focus of a patent claim—recite a "device configured to *communicate identification information* associated with a low-altitude aircraft." *Id.*, Ex. 1 at Cl. 21 (emphases added). Claim 21's body then recites elements consistent with that overarching focus. *Id.* at 9 (italicizing claim body elements that are part of the alleged advance). So, far from overgeneralizing the claim, the abstract idea comes straight from the claim language itself.

(b) Airspace Does Not Distinguish Defendants' Analogies To Longstanding Human Practices.

Airspace does not dispute Defendants' Claim 21 analogies to longstanding human practices of communicating identification information. For instance, Airspace does not deny that pilots for ages have communicated identification information, such as their aircraft identification or call sign, over the radio. Doc. 18 at 10 (making analogy); Doc. 32 at 5-9 (failing to dispute). Those two-way communications involved pilots communicating information to air traffic controllers, military bases, command centers, etc., who then communicated information back to the pilots. And using a call sign (*e.g.*, "Maverick") is analogous to a "secure identifier" because the call sign

¹ The patent is even titled "Low Altitude Aircraft *Identification* System." Doc. 18, Ex. 1 at Title.

uniquely identifies a pilot without revealing the pilot’s true identity to a listening enemy.² Nor does Airspace dispute that humans have for ages communicated identification information outside the vehicular environment, such as a presidential codename. *See* Doc. 18 at 10; Doc. 32 at 5-9.

Not only does Airspace fail to distinguish the claims from Defendants’ analogies, Airspace runs away from its own repeated analogy to license plates. Airspace now says those analogies do not matter because “a conventional license plate does not *transmit* a signal.” *See* Doc. 32 at 7 (emphasis added). But that is beside the point for the step one inquiry. Relating a longstanding human practice like communication of identification information (*e.g.*, via a license plate) to “wireless communications systems makes it no less abstract.” *See, e.g., Redwood Techs., LLC v. Netgear, Inc.*, No. 22-1272-GBW, 2024 WL 4591852, at *10 (D. Del. Oct. 28, 2024)³. The *Redwood* court found “a communication including information about its sender” is a “longstanding practice,” even in the context of a computer networking environment. *Id.* So too here. It does not matter that the claimed identification information is transmitted in a signal.

(c) Airspace Cannot Avoid The Functional, Results-Oriented Language In Claim 21.

Claim 21 is a quintessential example of a claim recited using functional, results-oriented language. The claim lacks any details on how the recited functions are performed. Airspace’s arguments against this hallmark of ineligibility are flawed.

Airspace incorrectly argues that Defendants ignored “pertinent” limitations. *See* Doc. 32 at 9. But Defendants addressed each of the functions recited in Claim 21 in their opening

² Contrary to Airspace’s assertion, the opening memorandum explained why “use of a secure identifier” and two-way communications did not change the *Alice* step one analysis. *See* Doc. 18 at 11-13.

³ Unless otherwise noted, all internal quotation marks, citations, and footnotes from quoted material have been omitted.

memorandum and demonstrated how those functions are functionally recited. *See* Doc. 18 at 11-12. Defendants even cited Federal Circuit case law where analogous limitations were found to be functional. *See id.* (citing *Hawk Tech. Sys., LLC v. Castle Retail, LLC*, 60 F.4th 1349, 1357 (Fed. Cir. 2023)). Airspace’s opposition fails to distinguish that case and provides only a conclusory argument as to why the limitations of Claim 21 allegedly are not functionally recited.

If Airspace is arguing that Defendants ignored the “radio frequency communication antenna” and “radio communication module” claim language (*see* Doc. 32 at 9), Airspace misunderstands the law. Federal Circuit law focuses on whether the elements are functionally recited without any details on how the *functions* are performed, not on whether the claim recites generic hardware components that perform these functions. For instance, *Hawk* confirms this analysis by focusing on the *functions* disclosed in the claim language—even though the claim also recited the various generic hardware components that performed those functions. *See* 60 F.4th at 1353 (showing claim 1, including numerous hardware components, such as “an analog-to-digital converter,” a “personal computer based display device,” a “communications link,” a “storage device,” and others), at 1357 (concluding that claim 1 was functionally recited). Thus, the “radio frequency communication antenna” and the “radio communication module” are generic hardware components that simply do not make a difference at *Alice* step one (or *Alice* step two).

Airspace also argues that “utiliz[ing] a secure identifier” is not functional, results-oriented claim language. Doc. 32 at 10. This is wrong for two reasons. *First*, it is hard to imagine more functional, results-oriented claim language than “utiliz[ing] a secure identifier.” That is a result—use of a secure identifier—without any details in the claim about *how* that identifier is used. This language is classic functional, results-oriented language that is “*almost always found to be ineligible for patenting.*” *Beteiro, LLC v. DraftKings Inc.*, 104 F.4th 1350, 1356 (Fed. Cir. 2024)

(emphases added); *see also Redwood*, 2024 WL 4591852, at *10 (finding the focus of the claimed advance was directed to results “rather than to a means of achieving the claimed result,” and stating this conclusion was apparent because the claim at issue “lack[ed] meaningful limitations about how the CTS signal is used, generated, received, and transmitted”).

Second, Airspace’s argument is based on an inaccurate characterization of Claim 21. Airspace argues the claim is not functional because it identifies a “specific manner in which the *two-way communication* is established using ‘a secure identifier’ that may be recognized by both the remote station and the UAV.” Doc. 32 at 10 (emphasis in original). But this is not what Claim 21 recites. Claim 21 only recites “utiliz[ing] a secure identifier” and says nothing about “establish[ing]” two-way communication “using ‘a secure identifier,’” let alone one “that may be recognized by both the remote station and the UAV.” Airspace appears to be relying on the specification for those details by saying the patent “discloses” them. *See* Doc. 32 at 10. Of course, resorting to the specification in that manner is inappropriate in assessing functional claim language because the “analysis at step one ‘must focus on’ the claim language.” *Hawk*, 60 F.4th at 1357.

Airspace argues (without much analysis) that Claim 21’s recitation of “utiliz[ing] a secure identifier” is “similar” to the “claimed use of the BIOS” in *Ancora Techs., Inc. v. HTC America, Inc.*, 908 F.3d 1343 (Fed. Cir. 2018). *See* Doc. 32 at 10-11. But Airspace’s analogy mischaracterizes the *Ancora* claim. There, the claim did not merely recite “use of a BIOS” as Airspace says. *Id.* at 10. Instead, the claim recited various details—that Airspace omitted—on *how* the BIOS was used, *e.g.*, “using an agent to set up a verification structure in the erasable, non-volatile memory of the BIOS, the verification structure accommodating data that includes at least one license record, verifying the program using at least the verification structure from the erasable non-volatile memory of the BIOS.” *Ancora*, 908 F.3d at 1345-46. The Federal Circuit therefore

found that the claim “specifically identifies how that [computer] functionality improvement is effectuated in an assertedly unexpected way.” *Id.* at 1348-49. Claim 21, by contrast, lacks the level of specificity of the *Ancora* claim: it only recites “utiliz[ing] a secure identifier” without specifically identifying how to effectuate that use, let alone how to do so in an unexpected way. This, again, is purely functional, results-oriented language that is insufficient at step one.

(d) Airspace Does Not Distinguish Defendants’ Cited Case Law.

Airspace’s attempts to distinguish Defendants’ case law fail. Airspace never actually distinguishes *Prism*. Doc. 18 at 11-12 (analogizing to *Prism Techs. LLC v. T-Mobile USA, Inc.*, 696 F. App’x 1014 (Fed. Cir. 2017)); Doc. 32 at 11. Indeed, Airspace fails to identify any distinction between the claim there and Claim 21 here (or any other factual distinction). *See* Doc. 32 at 11. *Prism* is particularly on point here because it includes limitations like “receiving identity data from a device . . .” and “confirming the authenticity of the identity data...” that are analogous to Claim 21’s “transmit identification information . . .” and “utilize a secure identifier” limitations. Doc. 18 at 12-13 (explaining analogy to Claim 21). Rather than attempting to distinguish *Prism*, Airspace attempts a sleight of hand by immediately transitioning to a different case (*Ancora*) after *Prism* is introduced. But, as explained above, *Ancora* is distinguishable. *See supra* Section I.A.1.c.

Airspace also agrees that the *Redwood* court found the claim there was directed to the abstract idea of a “communication including information about its sender”—which mirrors the abstract idea here. *See* Doc. 32 at 10. Airspace nevertheless argues *Redwood* is distinguishable because Claim 21 also is directed to “authorizing UAVs and facilitating simultaneous, multiple respective trusted two-way communication between the UAVs and a remote system.” *Id.* at 11. Yet again, Airspace ignores the actual language of Claim 21, which does not recite those concepts.

(e) **Airspace’s Arguments That Claim 21 Is Directed To A Non-Abstract Idea Are Misplaced.**

The remainder of Airspace’s arguments are rife with legal flaws.

Airspace argues that Claim 21 provides a specific solution to a technical problem in “UAV management.” *See* Doc. 32 at 6, 8. According to Airspace, “there *must* be *two-way* trust between the server . . . and the drone” and “an *ad hoc* authorization network connection is *required* to exchange information” because the “*ad hoc* authorization network” allows “trusted two-way communication using the claimed ‘secure identifier.’” *Id.* at 7-8 (non-bolded italics in original; bolded italics added). These arguments are premised on a major legal flaw: Claim 21 does not recite those limitations. *Hawk*, 60 F.4th at 1357.

First, Airspace did *not* limit its claims to “UAVs” or “drones.” Airspace, instead, chose to more broadly claim a “low-altitude aircraft” in Claim 21. *See* Doc. 18, Ex. 1 at Cl. 21. The patent’s specification never defines a “low altitude aircraft,” let alone limits that term to a UAV. Instead, it states the invention “can be used to identify *any* vehicle, ship, aircraft or other static or mobile objects,” belying Airspace’s entire argument that it solved a problem specific to UAVs. *Id.* at 15:5-7. *Second*, even though Airspace now says it is “required,” Claim 21 does not recite “an *ad hoc* authorization network connection.” *Third*, Claim 21 does not recite the “*trusted* two-way communications” that Airspace says “must” be present. Instead, Claim 21 merely recites a generic “two-way communication.”

Airspace also repeatedly argues the claimed operation “did not exist before the invention” (Doc. 32 at 7) and “was not practiced at all before the Airspace inventions” (*id.* at 8). These arguments also are legally flawed because they conflate patent eligibility under 35 U.S.C. § 101 and novelty under § 102. Courts—from the U.S. Supreme Court to this District—have repeatedly stated that the ineligibility inquiry focuses on whether the claimed advance is abstract and not on

whether the invention is new. *See, e.g., Diamond v. Diehr*, 450 U.S. 175, 189-90 (1981) (“The question therefore of whether a particular invention is novel is ‘wholly apart from whether the invention falls into a category of statutory subject matter.’”); *Yu v. Apple Inc.*, 1 F.4th 1040, 1045 (Fed. Cir. 2021) (same); *In re TLI Commc’ns LLC Patent Litig.*, 87 F. Supp. 3d 773, 786-87 (E.D. Va. 2015), *aff’d*, 823 F.3d 607 (Fed. Cir. 2016) (“Thus the alleged novelty of the [patent] has limited, if any, relevance in determining whether the [patent] is directed to patent-ineligible subject matter.”).

Ultimately, Airspace must live with how it wrote Claim 21 and cannot rely on concepts not recited in the claim. Claim 21 is a quintessential example of functional claiming, is analogous to longstanding human practices, and is analogous to other claims held abstract. These indicators of abstractness confirm that the Court should hold Claim 21 abstract and proceed to *Alice* step two.

2. Step Two: Airspace Does Not Dispute That The Additional Elements Beyond The Abstract Idea In Claim 21 Invoke Anything More Than Generic Computer Components.

Airspace does not dispute any of Defendants’ *Alice* step two arguments. As Defendants explained, step two looks at the additional elements *beyond* the abstract idea to determine if those additional elements recite an inventive concept that is “significantly more” than the abstract idea itself. *See* Doc. 18 at 13. Defendants explained that Claim 21’s additional elements are merely generic computer components that perform routine computer functions of transmitting, receiving, and storing, and that the remaining elements of the claim merely recite the technological environment in which the abstract idea is applied. *Id.* at 13-15. Rather than dispute those arguments, Airspace points to a single alleged inventive concept: use of a “secure identifier.” *See* Doc. 32 at 11. This does not save the claim at *Alice* step two.

First, the use of a secure identifier is itself part of the abstract idea of communicating identification information and cannot be considered at step two. *See Simio, LLC v. FlexSim*

Software Prods., Inc., 983 F.3d 1353, 1363-64 (Fed. Cir. 2020) (“[T]he abstract idea itself[] cannot supply the inventive concept”); *Mobile Acuity Ltd. v. Blippar Ltd.*, 110 F.4th 1280, 1294 (Fed. Cir. 2024) (finding plaintiff’s purported inventive concept was part of the abstract idea). As Defendants explained in their opening memorandum (and here again), use of “a secure identifier” is part of the abstract idea itself. *See* Doc. 18 at 11-13 (explaining that “utiliz[ing] a secure identifier is abstract at step one). As such, it cannot supply an inventive concept because that concept must come from the additional claim elements *beyond* the abstract idea.

Second, even if considered at step two, “utiliz[ing] a secure identifier” does not qualify as an inventive concept. For starters, “utiliz[ing] a secure identifier” is purely functional language that cannot supply an inventive concept. *See Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (rejecting alleged inventive concept because the claim “only uses generic functional language”). Nowhere in any of the cited Federal Circuit case law has such functional, results-oriented language been held to survive at either step one or step two.

Moreover, Airspace’s own characterization of the “secure identifier,” as well as the patent itself, admit that “utiliz[ing] a secure identifier” is generic and conventional. Airspace characterizes its “secure identifier” as mere use of a generic “security protocol.”⁴ *See* Doc. 32 at 8. Such a generic “security protocol,” of course, is not inventive. Security protocols have long been used in various contexts, including pilot use of call signs. And the patent itself admits that the goal is to use an encrypted identifier “utiliz[ing] existing standards and equipment.” Doc. 18, Ex. 1 at 1:61-65. The “existing” standards the patent attempts to leverage are use of an “SSID,” which the patent admits is “a standard feature of the IEEE 802.11 WLAN architecture.” *Id.* at 4:43-46. There is nothing inventive about using a generic “secure identifier” with admittedly “existing standards

⁴ Airspace does not contend that Claim 21 is limited to a “rotated SSID” or “a one-time password based SSID” (Doc. 32 at 8)—likely because that would doom its infringement case.

and equipment.” Airspace even concedes its invention is “much like automatically configured wireless communication nodes in a wireless LAN *that use secure identifiers* and engage in two-way communication with control systems.” Doc. 32 at 6 (emphases added). Airspace just applied that routine, well-known, and conventional technology in the context of a particular technological environment, which is legally insufficient at step two.

Airspace’s remaining arguments yet again improperly rely on concepts not recited in Claim 21. *RecogniCorp, LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“To save a patent at step two, an inventive concept must be evident in the claims.”); *Two-Way Media*, 874 F.3d at 1338-39 (“The main-problem that Two-Way Media cannot overcome is that the *claim*—as opposed to something purportedly described in the specification—is missing an inventive concept.”). For instance, Airspace argues that “automated detection of UAVs and/or trusted communications between a remote station and several UAVs” were not well known (*see* Doc. 32 at 11), but that is not what Claim 21 recites. The claim recites “utiliz[ing] a secure identifier” without more. Doc. 18, Ex. 1 at Cl. 21. Airspace also argues that the claim uses identifiers “recognized to be secure by both the UAVs and the remote station” (Doc. 32 at 12)—but again, that is not what is recited in the claim. The claim merely recites the use of a secure identifier (*i.e.*, the “what”), while saying nothing about *how* that secure identifier is used. In sum, “utiliz[ing] a secure identifier” cannot supply an inventive concept at step two, and Claim 21 is patent ineligible.

B. Claim 1 Of The ’199 Patent Is Directed To The Abstract Idea Of Restricting Access To An Area Based On Identification Information And Does Not Recite An Inventive Concept.

1. Step One: Airspace’s Opposition Fails To Rebut The Indicators Of Abstractness In Claim 1.

Airspace does not dispute that “restricting access to an area based on identification information” is an abstract idea. *See* Doc. 18 at 15-16. Airspace instead argues that this description

of an abstract idea overgeneralizes the claim. *See* Doc. 32 at 16. But that argument is conclusory at best, as Airspace does not identify any claim element that Defendants supposedly ignored. Additionally, Airspace is wrong for two reasons.

First, Defendants’ characterization of the claim mirrors the Federal Circuit’s characterization of the claim in *Prism*. *See* 696 F. App’x at 1017. There, the court held a claim that recited “(1) receiving identity data from a device with a request for access to resources; (2) confirming the authenticity of the identity data associated with that device; (3) determining whether the device identified is authorized to access the resources requested; and (4) if authorized, permitting access to the requested resources” was “directed to the abstract idea of ‘providing restricted access to resources.’” *Id.* Given the similarity between the *Prism* claim and Claim 1 here, Defendants applied a similar abstract idea of “restricting access to an area based on an identifier.” *See* Doc. 18 at 18-19.

Second, Airspace’s argument ignores that the abstract idea is consistent with Airspace’s own characterizations of Claim 1 in its Amended Complaint and its opposition here. Doc. 32 at 16 (stating Claim 1 recites components that “restrict access to a given airspace in a specific way”); *see also* Doc. 12, ¶¶ 35, 38 (characterizing invention as a “way to determine whether aerial systems . . . have permission to operate in a specific airspace”). These characterizations are consistent with and support Defendants’ formulation of the abstract idea.

Turning to the indicators of abstractness, Airspace never distinguishes Defendants’ analogies to longstanding human practices (*e.g.*, will-call agents and security guards checking lists and IDs). *See* Doc. 18 at 17-18. As Defendants explained, these analogies are straight from the *Prism* case, where the Federal Circuit agreed that a claim mirroring Claim 1 was directed to these real-world analogues—even when it was recited in the computer context. *Id.* (citing *Prism*, 696 F.

App’x at 1017). Nor did Airspace distinguish Defendants’ analogy to an air traffic controller receiving the aircraft identity, determining if the aircraft is authorized, and, if not, directing the aircraft out of the airspace. *See* Doc. 18 at 1, 18. These analogies are clear indicators of abstractness. *See, e.g., Twilio, Inc. v. Telesign Corp.*, 249 F. Supp. 3d 1123, 1138 (N.D. Cal. 2017) (noting courts consider “whether the claims have an analogy to the brick-and-mortar world, such that they cover a ‘fundamental . . . practice long prevalent’”) (quoting *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 219 (2014)).

Instead of addressing these analogies, Airspace focuses on whether a human can *literally* practice each limitation of the claim.⁵ *See* Doc. 32 at 15. But that is not the correct analysis. Defendants do not have to establish that a human can literally practice every element of the claim; else, every computerized claim would pass muster under step one. *See Redwood*, 2024 WL 4591852, at *10 (relating a longstanding practice to wireless communication systems “makes [the concept] no less abstract”).⁶

Airspace also fails to provide anything other than a conclusory argument as to why Claim 1 is not functionally claimed. *See* Doc. 32 at 16. Although Defendants explained Claim 1 recites only functional, results-oriented language without any details on *how* the functions are performed (Doc. 18 at 20), Airspace concludes without analysis that Claim 1 is not recited in that way. *See* Doc. 32 at 16. Airspace does not identify any details in Claim 1 reciting *how* the functions are

⁵ Airspace cites *Tobii Technology, Inc. v. Weinblatt*, No. 2:20-cv-08062, 2021 WL 3879132, at *4 (D.N.J. Aug. 30, 2021). *See* Doc. 32 at 15. This case contains an incomplete statement of law. Although a mental process is one type of an abstract idea, abstract ideas also encompass longstanding human practices. *See Brunswick*, 640 F. Supp. 3d at 507 (stating that “merely a ‘longstanding . . . practice’” can be an abstract idea).

⁶ Even under Airspace’s view, a human can see a UAV, determine that it should not be there, and disrupt its operation using a gun or net (which the patent provides as examples of a disruption system, *see* Doc, 18, Ex. 2 at col. 10:56-64). Notably, though, Claim 1 is not limited to UAVs or BVLOS flight. *See id.* at Cl. 1.

performed, so the Court should find this indicator in favor of abstractness, as such claims are “almost always found to be ineligible for patenting.” *Beteiro*, 104 F.4th at 1356.

Airspace’s attempt to distinguish *Prism* and *PerformancePartners* (see Doc. 32 at 16-17) relies on a distinction without a difference. Airspace argues those cases are inapplicable because the cases allegedly involved *method* claims and not an *apparatus* claim. But “[p]atent eligibility does not depend on the form of the claim, whether computer-implemented innovations are claimed as a method or a system or a storage medium, [or] whether implemented in hardware or software.” *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1341 (Fed. Cir. 2013); see also *Content Aggregation Sols. LLC v. Blu Prods., Inc.*, No. 3:16-cv-00527, 2016 WL 6995490, at *4 (S.D. Cal. Nov. 29, 2016) (rejecting argument similar to Airspace’s); *Joao Bock Transaction Sys., LLC v. Jack Henry & Assocs., Inc.*, 76 F. Supp. 3d 513, 523 (D. Del. 2014) (“[T]he fact that the asserted claims are apparatus claims, not method claims, does not change the court’s analysis.”), *aff’d*, 803 F.3d 667 (Fed. Cir. 2015). Indeed, the Supreme Court—including in invalidating method and system claims in *Alice*—has “long ‘warn[ed] against’ interpreting § 101 ‘in ways that make patent eligibility depend simply on the draftsman’s art.’” *Alice*, 573 U.S. at 227. Airspace’s argument that it can escape patent ineligibility by claiming an apparatus rather than a method runs afoul of this Supreme Court warning and established case law. Without any valid distinction over *Prism* and *PerformancePartners*, those cases govern.

Nor do Airspace’s arguments that it provided a technical solution to a technical problem specific to UAVs save the claim from abstractness. Airspace argues that the ’199 Patent solved a problem concerning “the authorization of UAVs to operate in a given airspace” (Doc. 32 at 13), and the technical solution was to “discriminate between authorized and unauthorized UAVs” (*id.*

at 14).⁷ But this argument fails for two reasons. *First*, Airspace’s own patent undermines its argument. Claim 1 is not limited to UAVs, but more broadly recites an “aerial system.” *See* Doc. 18, Ex. 2 at Cl. 1. The patent explains that an “aerial system” need not even be an aircraft; it “can alternatively or additionally be a terrestrial system, aquatic system, or be *any other suitable system*.” *Id.* at 3:26-29 (emphasis added); *see also id.* at 3:29-32 (broadly describing examples of “aerial systems” beyond UAVs). Far from solving a problem and solution specific to UAVs, Airspace’s own patent demonstrates that it provides an abstract solution that applies to *any* “suitable system.” *Second*, “discriminat[ing] between authorized and unauthorized” vehicles is not a *technical* solution. Rather, it is a non-technical solution that has long existed outside the computer context. The ’199 Patent proves this by describing the solution as a comparison of identifiers against a list—such as a “whitelist” or “blacklist”. *See* Doc. 18, Ex. 2 at 4:9-14, 10:19-31, 18:39-50 (describing checking an identifier with a “permissions module” by using a blacklist or whitelist to see if the identifier is on the list). This is an age-old concept that has long existed outside the realm of computers—the court in *Prism* held as much when it analogized the claim there to verifying names on a list. 696 F. App’x at 1017.

Airspace also cites, without analysis, to *Thales Visionix Inc. v. United States* to argue that Claim 1 recites physical components that achieve a particular result. *See* Doc. 32 at 12-13 (citing 850 F.3d 1343, 1348-49 (Fed. Cir. 2017)). *Thales* is distinguishable. In that case, the Federal Circuit found the at-issue claims were not abstract because they specified “a unique arrangement” of inertial sensors. *Id.* at 1349. Here, Airspace claims generic components (*see* Doc. 18 at 21) and never asserts they are recited in a “unique arrangement” as in *Thales*.

⁷ Airspace later inconsistently asserts that “using WiFi signals to transmit unique identification information from UAV” is the technical solution. Doc. 32 at 17. But, as noted before, applying an abstract idea to a wireless environment does not remove the claim from abstractness. *Redwood Techs.*, 2024 WL 4591852, at *10.

In sum, Airspace fails to rebut the presence of each indicator of abstractness, and the Court should find Claim 1 directed to an abstract idea and proceed to step two.

2. Step Two: Airspace Does Not Dispute That The Additional Elements Beyond The Abstract Idea In Claim 1 Invoke Anything More Than Generic Computer Components.

Airspace does not identify any specific claim language as providing an inventive concept. *See* Doc. 32 at 17-18. As best as Defendants can glean from Airspace’s argument, Airspace contends the inventive concepts are the “disclosure” of a “system for determining whether one or more UAVs may operate in an airspace” and an “apparatus that leverages unique identifiers associated with particular UAVs.” *Id.* at 17. The problem with that argument, however, is that Airspace is not relying on actual claim language. For the court to consider whether the claim contains an inventive concept that would transform the nature of the claim into an eligible application, the concept must be recited in the claims. *Two-Way Media*, 874 F.3d 1338-39 (explaining that the inventive concept must be in the claim).

If Airspace is pointing to the “broadcast [of] an aerial system identifier signal unique to the aerial system” and the “determin[ation] that the aerial system associated with the aerial system identifier signal is not permitted to be in an airspace” (*see* Doc. 32 at 17; *id.*, Ex. 2 at Cl. 1), these claim elements are part of the abstract idea and cannot supply an inventive concept. Doc. 18 at 16-20 (treating that language as part of abstract idea); *see Simio*, 983 F.3d at 1363-64 (explaining that the abstract idea cannot supply the inventive concept). And, in any event, the patent acknowledges both these elements were conventional. Specifically, the specification describes ADS-B, which Airspace admits was used to broadcast unique identifiers for aerial vehicles before the alleged invention of Claim 1. *See* Doc. 18, Ex. 2 at 8:66-9:3 (listing ADS-B radio as an example of an electromagnetic wave transmitter within the identification transmission system); Doc. 12, ¶ 16. The patent also describes the use of conventional whitelists and/or blacklists to distinguish

authorized and unauthorized aerial vehicles. *See* Doc. 18, Ex. 2 at 4:9-14. There is nothing inventive about those concepts (though the court need not consider them at all because they are part of the abstract idea).

The only elements remaining in the claim beyond the abstract idea are generic computer components that cannot save the claim at step two. Faced with Defendants’ citations to Airspace’s own admissions that those components are generic, Airspace simply proclaims that those elements are not generic. *See* Doc. 18, 20-21; Doc. 32 at 18. This conclusory argument should be rejected.

In sum, Claim 1 merely computerizes the abstract idea using generic computer components and does not contain an inventive concept. Claim 1 fails step two and thus is ineligible.

C. Claim 20 Of The ’711 Patent Is Directed To The Abstract Idea Of Flight Control Based On The Relative Location Of A Target And Does Not Recite An Inventive Concept.

1. Step One: Airspace’s Opposition Fails To Rebut The Indicators Of Abstractness In Claim 20.

Airspace fails to distinguish each of the indicators of abstractness as to Claim 20. *First*, Airspace did not distinguish Defendants’ analogy showing that Claim 20 merely automates the longstanding human practice of pilots performing flight control relative to a target. *See* Doc. 18 at 23-24. Instead, Airspace argues the “specific steps claimed” do something a human cannot: “the autonomous operation of a UAV beyond the visual line of sight to capture a target aerial vehicle once the UAV is in the vicinity of the target.” Doc. 32 at 22; *see also id.* at 21 (arguing the same). But that is nowhere near what Claim 20 says, and Airspace does not identify any actual claim limitation that is not analogous to what a pilot has done since the dawn of flight.⁸

⁸ Airspace suggests that there must be “record evidence” that the human process is the “same as the process required by the claims.” Doc. 32 at 23 (citing *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313-14 (Fed. Cir. 2016)). But *McRo* held there was an improvement to computer animation by using specific rules of a particular type in the claims. And, as recently noted in *Game Play Network, Inc. v. Patent Systems, Inc.*, “the Federal Circuit has generally been

Second, (and relatedly), Airspace’s attempt to distinguish this Division’s *Brunswick* case fails. Airspace again roots its alleged distinction on the same unclaimed concept quoted above, but that is a distinction without a difference because the claim does not contain those limitations. *Brunswick* thus remains on point and governs.

Third, Airspace ignored Defendants’ argument that the claim limitations “recite[] generic steps of a kind [courts] have frequently held are abstract” (Doc. 18 at 25), and wholly failed to address Defendants’ cited cases for each of the claimed functions.

Beyond those indicators of abstractness, Airspace’s step one arguments for Claim 20 suffer from a legal flaw seen throughout Airspace’s arguments for the ’959 and ’199 Patents—specifically, they repeatedly rely on unclaimed concepts. *Hawk*, 60 F.4th at 1357 (rejecting attempting to rely on unclaimed concepts and stating step one analysis “must focus on the claim language”). Airspace argues Claim 20 solves a technical problem specific to UAVs—limited compute budget available on board the UAVs—with a technical solution that involved a “spacio-temporal awareness engine” that “can be” implemented using “simultaneous leveraging of high- and low-resolution image streams.” *See* Doc. 32 at 18-24. Airspace further argues that the “claimed invention allowed UAVs to operate beyond the visual line of sight” (BVLOS). *Id.* at 21.

But—yet again—Claim 20 recites none of these concepts.

Claim 20 does not even recite “UAVs.” *See* Doc. 32 at 18, 24. Rather, the claim recites a “reference aerial vehicle,” and the specification explains that an aerial vehicle may include a “drone, multicopter aircraft, airplane, UAV, helicopter, or *any other vehicle capable of flight*.” Doc. 18, Ex. 3 at Cl. 20, 4:10-13. The claim also does not recite anything about operating “BVLOS.”

hesitant to expand *McRo* beyond its facts”—facts that are not present here, where there is no improvement to computer animation or claimed rules of a particular type. No. 23-323-GBW, 2024 WL 3226214, at **8-9 (D. Del. June 28, 2024).

Nor is there a “spacio-temporal awareness engine,” let alone one that implements “simultaneous leveraging of high- and low-resolution image streams.” Airspace diverts attention away from its claims and dives deep into the specification for these concepts, but, as noted above, the analysis “must focus on the claim language.” *Hawk*, 60 F.4th at 1357 (cleaned up).

Because Claim 20 does not recite these elements, Airspace’s reliance on *Contour* and *VideoLabs* undermines its argument. Those cases involved, as Airspace admits, *claims* that recited a “spacio-temporal model” and *claims* that recited video streams in high- and low-quality formats. Doc. 32 at 20. That is not the case here as Claim 20 does not recite these elements.

Claim 20 has multiple indicators of abstractness, and the Court should proceed to step two.

2. Step Two: Airspace’s Conclusory Argument Identifies Nothing Inventive In The Claims Beyond The Abstract Idea Itself.

Defendants explained that the only additional elements beyond the abstract idea are generic computer components and cited the specification’s description of these components as proving its point. *See* Doc. 18 at 26-27. Airspace’s only rebuttal is the bare denial that the patent does not use such generic components. The Court should reject this conclusory argument.

Airspace also fails to identify any actual claim language as supplying an inventive concept. Instead, Airspace appears to argue that “using a spacio-temporal awareness engine to efficiently locate and track items of interest using different processing schemes to determine a relative three-dimensional location of a target and navigating in relation to the target” is an inventive concept. Doc. 32 at 24. But, as explained above, that is not the claim language. And, if Airspace is arguing that the steps of “determining a three-dimensional relative location...” and “performing the flight control operation...” are the inventive concepts, those limitations are part of the abstract idea itself and cannot supply an inventive concept. *See Simio*, 983 F.3d at 1363-64.

In sum, outside of the abstract idea, Airspace fails to identify *any* inventive concept, leaving the claim only with generic computer components. As such, Claim 20 does not pass muster at step two, and the Court should hold the claim patent ineligible.

II. AIRSPACE IMPROPERLY ATTEMPTS TO PLACE THE BLAME ON SKYDIO AND AXON FOR ITS OWN FAILURE TO MEET THE PLEADING STANDARD.

Airspace touts the overall length of its pleading and the number of website citations to justify the infringement allegations in its Amended Complaint. But quantity does not equate to quality, and the fact remains that the Amended Complaint does not identify any specific accused product with respect to third-party Skydio or defendant Axon.

The bulk of Airspace’s argument involves its improper attempt to shift the blame for these pleading deficiencies on Skydio and Axon, saying it repurposed language from Skydio and Axon marketing materials. *See* Doc. 32 at 25. This is no excuse. As Defendants explained in their opening memorandum, the language used in Airspace’s Amended Complaint is so generic that it does not even identify whether Airspace accuses a software or hardware product (Skydio “AADT”) or whether it accuses a solution that is “associated with” low-altitude aircraft or the actual aircraft (Axon “Air” and “DFR”). *See* Doc. 18 at 28-30. Airspace’s repetition of quotes from the marketing materials in its brief does nothing to provide clarification.

Airspace’s reliance on those materials, in fact, proves the opening memorandum’s point that accusing the Axon Air/DFR “solution” and Skydio “AADT” does not supply sufficient notice. *See* Doc. 18 at 27-28. Airspace’s citation to Axon’s product guide illustrates this. *See* Doc. 32 at 26, 29; Doc. 12, ¶¶ 175-176 (citing https://a.storyblok.com/f/198504/x/f5a31b50a2/axon-air-product-guide-en_us.pdf). For example, the product guide lists specific Axon and Skydio products available under the Axon “solution,” including products that are irrelevant to this suit, such as

Axon Evidence. No Skydio product in that guide is called “AADT.”⁹ And, not a single Axon product is called “Axon Air” or “Axon DFR.” Airspace had that guide in its hands when it drafted its complaints and could have identified the specific products accused of infringement. Airspace, however, chose to leave its allegations vague by not identifying any specific product.

Ultimately, Airspace’s fallback is that discovery will “bear out” the relevant product offerings. *See* Doc. 32 at 26 (alleging Airspace can “do no more” with its allegations related to “AADT” “without the benefit of discovery from Defendants and Skydio”), at 29 n.7 (“[D]iscovery from Axon will bear out whether Axon Air and Axon DFR are different product offerings.”). This argument is backwards and amounts to seeking permission to conduct a fishing expedition. Airspace must first meet the pleading standard by accusing specific products and then conduct discovery based on the proper scope of its pleading. Airspace’s unsupported assertion that it needs discovery to plead its case reinforces a main gatekeeping function underlying pleading standards: “[I]t is only by taking care to require allegations that reach the level suggesting [a plausible claim] that we can hope to avoid the potentially enormous expense of discovery in cases with no reasonably founded hope that the [discovery] process will reveal relevant evidence.” *See Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 559 (2007). Airspace’s claims as they relate to Axon and Skydio products therefore must be dismissed for lack of sufficient notice.

III. CONCLUSION.

Defendants request that the Court dismiss Airspace’s Amended Complaint with prejudice.

⁹ Airspace’s citations to Skydio’s website and materials are beside the point. Only Axon and DEDrone are accused in this suit, so whether a third-party website offers a product or functionality is irrelevant.

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Respectfully submitted,

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I certify that on January 27, 2025, the foregoing was electronically filed with the Clerk of Court using the CM/ECF system, which automatically sends a notification of electronic filing (NEF) to the following:

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